

NEEDS ASSESSMENT INSTRUMENTS

The following techniques are used to gather needs assessment information.

- Table-Top Needs Assessment
- Nominal Group Technique/Consensus Decision Making
- Cause and Effect Diagram (Fishbone)
- Pareto Diagram
- Interviews
- Surveys

◆ TABLE -TOP NEEDS ASSESSMENT

The table top approach includes a special team of 2 - 5 job incumbents, 1 – 2 immediate supervisors, 1 – 2 other subject matter experts as appropriate, and 1 – 3 trainers. The team plans the process and then participates in examining that information.

Benefits:

1. It promotes buy-in of the process and results since operating organizational personnel are part of the process.
2. Needs-assessment becomes a process initiated by the work force. The job incumbents learn the needs-assessment process so they can be aware of things such as expecteds, actuals, gaps, causes, solutions, etc. when they return to work. This has the potential of having workers identify where improvements can be made and whether non-training solutions are applicable.
3. The needs assessment process can be conducted by the team in a short amount of time because of the team's mix of expertise. By having the team review documents and be led through table-top techniques, most of the needs-assessment information can be uncovered without the use of extensive interviewing, observation, or surveys that may impact facility operations and take a lot of time.

Lockheed Idaho Technologies Company, Idaho National Engineering Laboratory offers a series of courses on table-top techniques, to include: Table-Top Needs Assessment Seminar, Table-Top Job Analysis Seminar, Table-Top Training Design Seminar, Table-Top Analysis and Design, and much more. For more information and course descriptions check out http://cted.inel.gov/cpi/course_detail.cfm. or call Rob Crose, INEL Institute, on (208) 526-9229.

◆ Nominal Group Technique/Consensus Decision Making

The Nominal Group Technique is a method of reaching consensus. It is a structured group decision-making process used to assign priorities to rank order a group of items.

Steps:

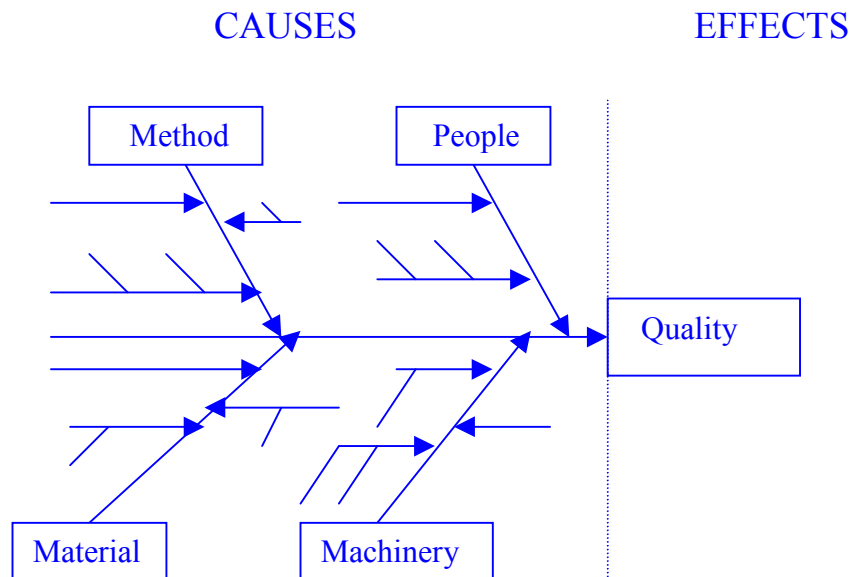
- (1) Individually generate ideas in writing
- (2) Record ideas without discussion
- (3) Conduct group discussion for clarification of meaning, not argument.
- (4) Vote to establish the priority or rank of each item.

Helpful Planning Guidelines:

- (1) Identify in advance the questions to be addressed.
- (2) Plan to address only one topic per meeting
- (3) Allow no comment or discussion during the recording
- (4) Focus on clarification of meaning
- (5) Limit discussion, throughout the discussion phase, to brief explanations.

◆ Cause and Effect Diagram (Fishbone)

This diagram represents the relationship between some “effect” and the possible “causes” influencing it. The effects are stated on the right side of the chart and the major influences or “causes” are listed to the left.



For every effect there are likely to be several major categories of causes. The major causes might be classified under four categories, People, Machines, Methods, and Materials. In administrative areas it might be more helpful to use: Policies, Procedures,

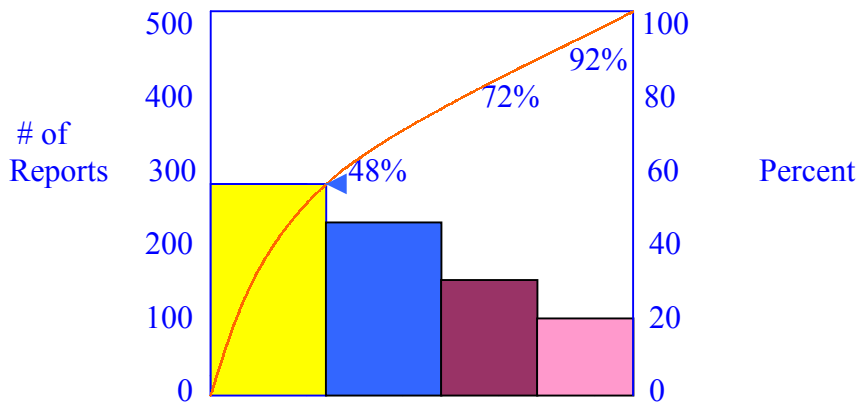
People, and Plant. These categories are just suggestions, you may want to use different categories that would better meet your needs.

Steps:

- (1) Select the problem
- (2) Construct the diagram
- (3) Rank order the causes according to their level of importance

◆ Pareto Diagram

The pareto diagram is a technique used for rank ordering causes from most to least significant. The Pareto Diagram is based on the Pareto principle, which states that just a few of the causes often account for most of the effect. The Pareto Diagram displays, in decreasing order, the relative contribution of each cause to the total problem.



Steps:

- (1) Select the problem to be compared or rank ordered
- (2) Select the standard unit of measurement for comparison, such as frequency
- (3) Select the time period to be analyzed
- (4) Gather necessary data on the occurrence of each cause
- (5) Compare the frequency or cost of each cause relative to all other causes
- (6) List the causes from left to right on the horizontal axis in their order of decreasing frequency or cost.
- (7) Above each classification, draw a rectangle whose height represents the frequency or cost in that classification.
- (8) To help interpret the chart, draw a line from the top of the tallest bar, moving upward from the left to right. This shows the cumulative frequency of the categories.

◆ Interviews

Interviews are an important information gathering technique that also fosters cooperative working relationships.

(1) Before the interview:

- gather background information on topic
- outline areas to be covered and major questions to be asked (open ended questions stimulate ideas)
- Tell interviewee the purpose and proposed length of the interview
- Choose a comfortable meeting place

(2) During the interview:

- help interviewee feel comfortable
- Remain analytical and objective
- Take notes
- Summarize and relect back answers to verify what you have learned

(3) After the interview

- Thank the interviewee
- Review and interpret data as soon as possible.

◆ Surveys

Surveys and questionnaires can be used to help determine the training needs of your organization.

Although surveys historically yield a low percentage of return, you may improve your responses by:

- personal retrieval on the due date, or
- follow-up telephone calls requesting that the fill out the survey and return it

Steps:

- (1) Identify candidates to be surveyed
- (2) Formulate questions and test them out.
- (3) Make revisions to the questions, as necessary
- (4) Establish weightings for response
- (5) Distribute surveys
- (6) Follow up to encourage response

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